

WHAT IS CLAIMED IS:

1. A nonreciprocal circuit element comprising a magnetic plate having a plurality of through holes; a
5 plurality of center conductors crossing each other at a predetermined angle on a side associated with a first surface of the magnetic plate; and a common electrode disposed on a side associated with a second surface of the magnetic plate and connected to the center conductors via the through holes.

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2. A nonreciprocal circuit element according to Claim 1, wherein the magnetic plate is contained in a case, and at least one of a vertical dimension and a horizontal dimension of the magnetic plate substantially coincides with a vertical
15 dimension or a horizontal dimension of an interior of the case.

3. A nonreciprocal circuit element according to Claim 1, wherein capacitors connected to first ends of the center
20 conductors are disposed on the side associated with the first surface of the magnetic plate.

4. A nonreciprocal circuit element according to Claim 3, wherein the case is formed by a first yoke disposed on the
25 side associated with the first surface of the magnetic plate, and a second yoke disposed on the side associated with the second surface of the magnetic plate so as to also function as a grounding electrode, the capacitors being connected to

the second yoke via other through holes provided in the magnetic plate.

5. A nonreciprocal circuit element according to Claim 1,
5 wherein terminal electrodes connected to the first ends of the center conductors are engaged with side edges of the magnetic plate.

6. A nonreciprocal circuit element according to Claim 1,
10 wherein the center conductors are formed, by printing, over the magnetic plate via insulating layers.

7. A nonreciprocal circuit element according to Claim 3,
wherein an insulating spacer and a biasing permanent magnet
15 are laminated on the side of the first surface of the magnetic plate, solder plating layers are formed on one surface, associated with the magnetic plate, of the insulating spacer, the solder plating layers electrically connecting the first ends of the center conductors to the
20 capacitors and the terminal electrodes, respectively.

8. A nonreciprocal circuit element according to Claim 1,
wherein the center conductors are formed on insulating films,
and the insulating films are laminated over the magnetic
25 plate with the center conductors facing the magnetic plate.

9. A nonreciprocal circuit element according to Claim 8,
wherein the capacitors are disposed on the insulating films.

10. A nonreciprocal circuit element according to Claim 1, wherein a terminating resistor is connected to one of the center conductors.

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11. A nonreciprocal circuit element according to Claim 10, wherein the terminating resistor is mounted on the second yoke, and the terminating resistor is electrically connected to the center conductors via another solder plating layer
10 formed on one surface, associated with the magnetic plate, of the insulating spacer.

12. A method of manufacturing a nonreciprocal circuit element,

15 wherein a plurality of center conductors is laminated, via insulating layers, on a side associated with a first surface of a magnetic plate having through holes, and a common electrode is formed on a side associated with a second surface of the magnetic plate,

20 capacitors are disposed in proximity to first ends of the center conductors, and terminal electrodes are engaged with side edges, adjacent to the first ends, of the magnetic plate,

an insulating spacer having solder plating layers is
25 laminated over the magnetic plate such that the solder plating layers are opposed at least to the first ends of the center conductors,

and the solder plating layers are melted by heat to

electrically connect the first ends to the capacitors and the terminal electrodes, respectively.

13. A method of manufacturing a nonreciprocal circuit
5 element,

wherein a plurality of insulating films having center conductors and capacitors is laminated on a side of a first surface of a magnetic plate having through holes, and a common electrode is formed on a side associated with a second
10 surface of the magnetic plate,

and terminal electrodes are engaged with side edges, adjacent to first ends of the center conductors, of the magnetic plate.

15 14. A method of manufacturing a nonreciprocal circuit element according to Claim 12, wherein the center conductors are connected to the common electrode via the through holes.

15. A method of manufacturing a nonreciprocal circuit
20 element according to Claim 13, wherein the center conductors are connected to the common electrode via the through holes.